

Application No. 10/529,544
Reply dated January 21, 2009
Reply to Office Action of October 20, 2008

Docket No. 4452-0158PUSI
Art Unit: 3609
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AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method for calibrating at least one milk meter in a milking system comprising at least one milking station having at least one milk meter that measures at least one value of a parameter that corresponds to milking performance of a milking animal, said milking station is accessible to a herd of milking animals, said method comprising the steps of:

- determining an internal or external reference value (RV) which reflects an amount of milk received from a number of milking animals during a selected time period in a reference unit,
- retrieving all measured values during a selected time period for each milk meter that by itself contribute to the amount of milk received by said reference unit,
- comparing said reference value (RV) with a sum of all retrieved measured values and calculating a correction function for at least one of said milk meters which has been determined to be in a condition to cause errors in measurement, and therefore to be in need of a calibration by comparing an expected value of the milking performance with the measured value, and
- using said calculated correction function to adjust the measured value from said at least one milk meter.

2. (Cancelled)

3. (Previously Presented) The method according to claim 1, wherein said reference unit is selected to be a receiver that collects the milk in the system after milking of each milking animal, and said step of determining the reference value is performed by measuring the amount of the milk in the receiver, thus said reference value is an internal reference value.

4. (Previously Presented) The method according to claim 1, wherein said reference unit is selected to be an intermediate milk meter which is directly connected to at least one milk meter, and said step of determining the reference value is performed by measuring a value of a milking performance parameter of said intermediate milk meter, thus said reference value is an internal reference value, which may be compared to the values measured by each milk meter.

5. (Previously Presented) The method according to claim 1, wherein said milking system is provided with an external unit being provided with an external milk meter to measure the amount of milk transferred from the milking system to said external unit, said step of determining the reference value (RV) is performed by measuring the amount of milk transferred from a receiver to the external unit using said external milk meter, thus said reference value is an external reference value.

6. (Previously Presented) The method according to claim 5, wherein the method further comprises the additional steps of:

- determining the amount of milk in the receiver prior to transferring the milk to the external unit,
- comparing said amount of milk in the receiver with the external reference value, and
- calculating the correction function which is used when determining the amount of milk in the receiver.

7. (Previously Presented) The method according to claim 5, wherein said method further comprises the additional steps of re-calibrating the milk meters that by themselves contribute to the amount of milk received by the receiver when the correction function has been calculated which is used when determining the amount of milk in the receiver.

8. (Previously Presented) The method according to claim 1, wherein the correction function is selected to be equal to 1 unless the reference value (RV) deviate more than a predetermined amount from the sum of all retrieved measured milking performance values.

9. (Original) The method according to claim 8, wherein said predetermined amount is selected to be 5%.

10. (Previously Presented) The method according to claim 1, wherein the milking system comprises a control device connected to each milk meter, said internal or external reference value being accessible to said control unit, and said calculations of correction functions is performed in said control unit.